



PORTLAND BUREAU OF EMERGENCY MANAGEMENT

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Ms. Marlene Dortch, Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

[Submitted via FCC Electronic Comments Filing System]

Re: Comments on Notice or Proposed Rulemaking on the Matter of Improving Wireless Emergency Alerts and Community-Initiated Alerting (Proceeding 15-91)

Dear Secretary Dortch and Members of the Federal Communications Commission:

The Portland Bureau of Emergency Management (PBEM) has been providing emergency public notifications since the launch of the region's Public Alerts program in 2010 (www.publicalerts.org). Since then, we have notified thousands of residents of Portland and Multnomah County via phone, SMS and email about emergency situations that require their immediate attention and action (i.e. shelter-in-place or evacuation, etc.).

In 2012, we became the first jurisdiction in Oregon with access to the Wireless Emergency Alerts (WEA) Program. In addition to multiple WEA activations in our jurisdiction by the National Weather Service and law enforcement agencies (AMBER Alerts), PBEM disseminated a WEA message to 300,000 devices on February 9, 2014 in response to a dangerous ice storm. Additionally, we have prepared but not sent at least two WEA messages for incidents that resolved themselves prior to a WEA launch.

Use of the WEA system continues to be a key component of our emergency public information strategy. We believe that key enhancements to the system are needed and are encouraged by the majority of the Commission's proposed rules. We are pleased to provide our comments on the proposed rules and welcome the opportunity to improve this lifesaving system.

Respectfully,

David J. Blitzer
Operations Manager
Portland Bureau of Emergency Management

Comments from the Portland Bureau of Emergency Management (PBEM)

III(A)(1)(9) – Expanding the maximum permissible length of WEA messages from 90 to 360 characters where technically feasible and continuing to allow delivery of 90-character messages on 2G and 3G networks and devices

PBEM strongly supports expanding the maximum permissible length of WEA messages to 360 characters as proposed by the Commission. It is PBEM's position that 90-character messages are wholly insufficient to provide the level of information needed by the public to understand the scope of the emergency and take necessary precautions.

Further, the inability to direct the public to a location to receive additional information (e.g., a URL or telephone number) further enforces our position that additional characters are necessary. Increasing the length of WEA messages to 360 characters, along with the ability to direct the public to additional sources of information (further comments on this below), will greatly enhance our ability to provide critical, potentially lifesaving information to the general public.

With respect to permitting legacy networks and devices to continue broadcasting 90-character messages, this should be continued as long as those networks and devices are supported. It is likely that some of the most vulnerable populations (seniors, people on fixed incomes, economically disadvantaged, or persons with disabilities and other access and functional needs) still rely on 2G and 3G devices and it is PBEM's position that receiving some critical information is far better than receiving none at all. However, we strongly encourage the Commission to work with CMS providers on determining alternate ways that these legacy consumers can receive the full 360 characters. PBEM does not support only sending the first 90 characters of a 360-character message as suggested in III(A)(1)(14) of this Notice, as this could be confusing and provide the improper information to recipients. Instead, we offer two potential alternatives for consideration:

1. Permit legacy providers to distribute the full 360-character messages in up to four time-phased 90-character messages (similar to concatenated SMS messages). This option would allow alert originators the ability to craft a single message and recipients on legacy networks the ability to receive the full message. Time-phasing the four messages is key as it is important that the various sections of the message arrive in order to promote comprehension of the entire message by recipients.
2. Permit alert originators to craft two messages, a 90-character message for legacy networks/devices and a 360-character message for advanced networks/devices. IPAWS and

alert origination software vendors would need to update their systems to support both receipt and distribution of this information.

III(A)(1)(10) – How will an increase in the length of WEA messages affect the accessibility of such messages by individuals with disabilities, seniors, and persons with limited English proficiency?

While WEA messages are designed to provide lifesaving information in a rapid format, considerations must be made for populations that may be excluded by the current 90-character format. This includes seniors, people with disabilities, access and functional needs, and those with limited English proficiency.

The use of acronyms, abbreviations, and other shorthand can be difficult for these populations to process. For example, WEA recipients who use audio dictation features to access alerts on their devices may not be able to effectively interpret what the message is trying to communicate. Additionally, the expansion of characters can allow those leveraging the WEA system to send targeted messages in multiple languages or in more clear, simple language.

III(A)(1)(11) – Is 360 characters the optimal maximum number of characters that should be supported for WEA?

As noted earlier in our comments, PBEM strives to keep most of our messaging as short as possible. Occasionally our messages do exceed 1,000 characters – particularly when conveying detailed, descriptive information about Drinking Water Quality Incidents (i.e. Boil Water). PBEM respects the analysis conducted and presented in the START report and in certain situations does see the benefit of messages in excess of 360 characters. To this end, we recommend that the final rule adopted by the Commission be reflective of the maximum number of characters that are technically feasible based on the comments sought from the wireless industry in III(A)(1)(12) of the Notice and not based solely on social science research or existing social media platforms. After the maximum number of characters that is technically feasible is identified by the wireless industry it should be left to alert originators at the local level to issue messages of a length they deem appropriate for the emergency situation being managed based on their expert knowledge of their local community.

III(A)(2)(18) – Creation of an additional class of WEA message, “Emergency Government Information”.

While alert originators can already send the message types mentioned by the Commission in this Notice (e.g., boil water advisories, shelter locations, etc.) under the existing rules, PBEM supports the Commission’s affirmative efforts to extend the use of the powerful technology to other types of emergency messaging.

The proposed definition of “[as] an essential public safety advisory that prescribes one or more actions likely to save lives and/or safeguard property during an emergency,” will not promote the adoption or use that the Commission appears to be seeking by creating this new class of WEA message. Information from public safety entities that can save lives and/or safeguard property are already adequately covered in the existing rule.

Instead, PBEM proposes this broader definition for the Commission’s consideration:

“Emergency Government Information messages are advisories that, in the opinion of the alert originator, provide time-sensitive information about an emergency condition or situation to promote the public’s situational awareness.” Widening the definition will allow alert originators the freedom to use WEA for a broad range of emergency conditions/situations while still adhering to the intention of the WARN Act.

III(A)(2)(21) – Amending the rules to allow consumers to opt-out of the Emergency Government Information message class and considering if, instead, it should be offered on an “opt-in” basis.

Until such time as Congress acts to modify the requirements set forth in the WARN act, the Commission should adopt rules requiring mobile device manufacturers to require that consumers affirmatively acknowledge the risk in opting out of imminent threat, severe threat, and, if adopted, Emergency Government Information message classes. The Commission should develop, with participation from the emergency management community, standard language that is displayed after a consumer elects to opt-out of one of these message classes but before such opt-out is effective.

III(A)(3)(25-26) – Proposed removal of ban against embedded phone numbers and URL in WEA messages.

PBEM strongly supports removing Section 10.440 of the WEA rules to allow alert originators to embed telephone numbers and URLs in WEA messages but only if adopted along with the improved geo-targeting capabilities as described in the Notice. While PBEM concurs with the Commission that mobile provider’s technology has drastically improved since the original WEA rules were adopted, there is no guarantee that any website that an alert originator may direct the public to obtain more information will be able to support the instantaneous increase in network traffic (even if the mobile carriers can support such traffic). The Commission should caution alert originators to ensure that the website and/or telephone number that they are directing people to for more information (e.g., government websites, 311 systems, etc.) are prepared to handle the rapid influx of network and/or telephony traffic. We concur with CSRIC IV, START, and FEMA that further study is needed and would add that, if the proposed rule is adopted, educational material for alert originators to make an informed decision about if and when to include a URL or telephone number in WEA messages should be put into place.

III(A)(3)(28) – Possibility of including interactive links in WEA messages, such that an alert recipient could provide real-time feedback to alert originators.

PBEM finds this proposal interesting and believes that additional study and discussion with stakeholders will be necessary to develop the rules needed to support this concept. This presents a fundamental shift of WEA from one-way to two-way. Alert originators would need to ensure that they are prepared to receive, analyze, and take action on all of the responses from the WEA message.

For example, our current Community Emergency Notification System can request message confirmation and/or poll recipients for a pre-populated response. These features are incredibly useful; however, they will increase the amount of time necessary to launch an alert and they will increase the workload of alert originators who need to manage responses.

Along similar lines, PBEM **strongly** encourages the Commission to adopt rules that require mobile service providers to return real-time data on the number of devices that receive a WEA message. Such data would be extremely valuable to alert originators in determining an estimated number of people within an alert area. Further, in the case of evacuation messaging, such feedback would provide emergency managers with intelligence on the progress of an evacuation. If such data was available, Portland would operationalize it by issuing a WEA message to relevant evacuation zones. If repeat messaging revealed the same number of devices receiving a WEA, we would: (1) increase our outreach effort to promote the public's evacuation compliance and (2) evaluate the need for, and likely request, additional search and rescue resources to return to the evacuation zone(s). Similarly, in a post-evacuation scenario the same delivery data could be used to evaluate the number and relative location where survivors may be located. Such feedback is likely more feasible as a short-term measure more so than the example proposed under the Notice.

III(A)(3)(28) – Alternative to limit embedded URLs and phone numbers to AMBER alerts only

PBEM does not support this alternative. Embedded references (URLs and phone numbers) should be permitted in all message categories.

III(A)(3)(29) – How can embedded URLs enhance accessibility of WEA for people with disabilities, seniors, and persons with limited English proficiency?

Similar to increasing the number of characters allotted for WEA messages, the ability to add/embed a URL in a WEA message can provide an avenue for recipients to better understand the nature of the emergency and protective actions that are required (if any).

PBEM has translated our common emergency messages into the 10 most commonly spoken languages in Portland in an effort to improve public information to people with limited English proficiency. The ability to link to the appropriate translation posted on the internet via a WEA message would certainly improve access for persons with limited English proficiency.

III(A)(3)(30) – Would the public interest be served by adopting rules that allow for multimedia-based alerts?

It is PBEM's position that the public interest would very much be served by the Commission adopting rules that support multimedia-based alerts. The ability to transmit maps of affected areas, exclusion and/or frozen zones, road closures, or even video messages from elected leaders would improve understanding of emergency conditions and subsequent compliance with emergency directives. Additionally, this feature can help with multilingual notifications. For example a photo of a non-English character translation can be sent or an audio file in a non-English language.

While we appreciate CSRIC IV's conclusion that the distribution of multimedia messages within existing cell broadcast technology is impractical, we remind the Commission that millions (if not tens of millions) of photos, videos, and audio messages are shared among consumers every day and believe that these existing mechanisms can be modified to be sent via the context of cell broadcasting technology. As such, we strongly encourage the Commission to work with the wireless industry to study the feasibility for such advancement and adopt rules requiring the wireless industry to incorporate this important technology.

II(A)(4)(31-33) Feasibility of Providing Multilingual WEA Messages

As noted previously in our comments, Portland is already taking steps to make messages available in languages other than English by pre-translating commonly issued emergency alerts. Acknowledging that not all alert originators will always have the capacity – especially during a developing emergency – to offer WEA messages in multiple languages, PBEM suggests the Commission adopt rules that:

1. Allow alert originators, if they choose, to issue WEA messages in multiple languages via alert origination software;
2. Require device manufacturers to allow consumers to select their preferred language for WEA messaging;
3. Require device manufacturers to display the English version of the message if the version of the message the consumer prefers is not offered by the alert originator;
4. Require device manufacturers, on appropriately equipped models (e.g., smartphones) to place "translate" button/link at the bottom of received WEA messages so the consumer, at their

discretion and as long as data service is available, can be linked to a commercially available translation tool (or local application) to assist in their understanding of the message; and

- a. It is important to note that abbreviated text is very difficult to translate using machine translation and should be avoided to the maximum extent possible.
5. Require mobile carriers to collect and share with alert originators in aggregate fashion the preferred languages of their consumers based on handset selection. Such data would be very helpful in directing alert originators to the languages other than English which should be the priority for either pre-incident translation or real-time translation during an emergency.

III(B)(37-38, 41) – Should mobile service providers be required to transmit any alert to a more defined area as indicated by an alert originator?

Portland appreciates the voluntary efforts already exhibited by several mobile service providers to geotarget messages more finely than a county area as required by the current rules. PBEM strongly encourages the Commission to adopt rules that require mobile service providers to distribute WEA messages within the confines of the target area (geocode, circle, or polygon) as specified by the alert originator. Such targeting is even more essential given a number of the other proposals under consideration by the Commission. PBEM does not believe compliance with this rule should be voluntary; it should be required.

With respect to the Commission's question as to whether mobile service providers can cite "network constraints" as a mechanism to transmit alerts to any area, we agree that such an exception within the rules would weaken the WEA system. Instead, PBEM offers that the Commission should continue to allow such approximation for legacy networks as described earlier in the Notice. For more advanced networks, particularly LTE networks that have the ability to employ sectorization, the Commission should require such technological advances to support highly targeted WEA alerting.

III(B)(37) – Other approaches to improve geo-targeting, including device-based geo-targeting solutions.

As noted above, PBEM strongly supports efforts to require improved geo-targeting of WEA messages. PBEM supports further study of such technology and encourages the Commission to consider what, if any, risks to message delivery exist with dependence on additional, device-based applications.

III(C)(1)(47-54) – WEA proficiency testing and public distribution of these messages.

PBEM concurs with CSRIC IV's assertion that alert originators need the ability to maintain proficiency by regularly testing the system, sending messages to the aggregator, and receiving acknowledgment codes.

While PBEM supports the Commission's proposal to require mobile service providers to receive and acknowledge state/local WEA tests, we do not believe distribution of the message to handsets is critical to ensuring system proficiency. PBEM is concerned that public distribution of these alerts, if performed too frequently, could lead to warning fatigue and further opting out from receipt of WEA messages by the public. Such fatigue is a likely outcome in areas with multiple overlapping alert originator jurisdictions (e.g., state, county, city, town, village, etc.) if each level of government elects to distribute test messages.

Instead, PBEM encourages the Commission to adopt rules that allow system testing by all alert originators, require mobile service providers to receive and acknowledge these messages, and return appropriate acceptance and/or error codes via the federal alert aggregator for alert originators to maintain system proficiency. Further, PBEM encourages the Commission to work with its stakeholders on encouraging alert origination software providers to build training and validation modules into their software packages that allow alert originators to train and test their skills in a no fault, no risk environment.

PBEM fully concurs with FEMA that very occasional distribution of test messages to the public to promote awareness of the system, demonstrate the public's ability to receive messages, and assure the public that their government is capable of alerting them is important. PBEM believes such messaging should occur in concert with recognized preparedness activities, like National Preparedness Month. Therefore PBEM recommends that the Commission adopt rules to allow alert originators to do the following:

Issue one (1) test WEA message every year that is distributed to the public as long as:

- a. The message clearly indicates that it is a test message;
- b. Is advertised ahead of time through media and/or other means and such advertisement includes the time range in which the message will be issued; and
- c. Is coordinated with other alert originators with common/overlapping jurisdiction to prevent warning fatigue.

Based on the above, PBEM does not believe that mobile service providers should be permitted to hold such test messages for 24 hours. Instead, such messages should be transmitted immediately upon receipt since the public will be expecting delivery at a prescribed time. A test message should be pre-empted by an actual message.

If technology can support more regular, but very limited distribution of WEA messages for proficiency testing as offered in III(C)(2)(54) of the Notice, to a “single, dedicated end-user device...” we would be highly supportive of the adoption of such rules.

With respect to opt-in testing, where the public can elect to support government alert originators, by receiving messages and, perhaps, completing after-action surveys, PBEM believes this proposal requires further study and consideration. PBEM is concerned that without clear and strict standards directing mobile service providers and handset manufacturers on design of the opt-in/opt-out screen, the public may inadvertently opt-out of emergency messages.

III(C)(2)(55-58) – Requiring mobile service providers to log messages and provide feedback with specific error codes in the case of message reduction.

As with any other mission-critical system, mobile service providers should be required to capture and report system errors. Further, PBEM encourages the Commission to adopt rules that would require mobile service providers to advise alert originators, following a test, when errors with downstream distribution of messages exist to the individual transmitter level. It is important for alert originators to know when this critical tool is impeded so that they can consider the need for alternative messaging.

III(D)(61-63) – Promoting mobile service and subscriber adoption of WEA messaging.

PBEM offers comments on our opinion on consumer opt-outs in response to III(A)(2)(21) above. To reiterate, the Commission should work with Congress to change the law eliminating the consumer’s ability to opt-out of imminent threat alerts issued by local and state-level alert originators for the reasons indicated in prior comments.

III(D)(65) – Consideration on offering consumers a greater number of opt-out choices

PBEM would support the Commission adopting rules that provide additional preferences (like Do-not-disturb scheduling) for certain message classes, including AMBER Alerts, as considered in the Notice. However, PBEM strongly believes that alert originators should retain the ability to override a consumer’s settings in the event of a life threatening emergency either by default or on an ad hoc basis. While we appreciate that Presidential-level alerts cannot, as a matter of statute, be blocked there are many local emergencies that require immediate public awareness and action long before a Presidential-level alert can be requested and issued.

III(E)(70) – Use of WEA/EAS Attention Signal as part of government-developed PSAs.

PBEM concurs with FEMA that public awareness is a key aspect to adoption of WEA and public service announcements will be even more important in the event additional message categories are promulgated by the Commission's rules. As such, PBEM supports the Commission amending the rules to allow use of the WEA/EAS attention tones as part of the public service announcements.

However, we are concerned that the language proposed on pages 45-46 of the notice restricts including the WEA attention signal to "...federal Public Service Announcements..." Like many jurisdictions, Portland often partners with the media to produce and disseminate PSAs on a variety of emergency preparedness topics and would want to be able to include the attention tone in our messaging. PBEM respectfully requests that the word "federal" be replaced with "government-developed or approved Public Service Announcements".

III(G)(76-77) – Prioritization of WEA Messages

As the Commission adopts additional classes of WEA messaging, including the Emergency Government Information message class proposed in this Notice, PBEM feels that additional traffic prioritization is also required. A hierarchy of message priorities with Presidential Alerts at the highest level followed by extreme and imminent threat alerts is advisable as WEA adoption increases and message classes expand.

While PBEM still supports the Commission's original finding that a WEA message should not interrupt an active telephone call, we do think that an active data session should be interrupted for a WEA message. However, we encourage the Commission to work with the mobile service provider industry to adopt rules that would allow the delivery of a WEA without interrupting an active voice call being conducted over a data session.

III(H)(78-81) – Consistency of WEA delivery across mobile service providers as the Commission adopts new rules.

While PBEM appreciates CSRIC IV's opinion and do not wish to burden mobile service providers, we disagree with the recommendation that mobile service providers may continue to provide WEA under the Commission's original rules and not adhere to the new rules adopted by the Commission in an effort to expand the utility of WEA messages. PBEM supports the Commission's opinion expressed in the Notice that all service providers should operate under a consistent regulatory framework and such consistency and expansion/improvement over time is squarely in line with the congressional intent under the WARN Act.

PBEM agrees with the Commission's assertion that such inconsistency could lead to interoperability and challenges by alert originators. More importantly, in PBEM's opinion, such inconsistency could also lead to confusion by the public receiving the message during an emergency, which could impede implementation of emergency protective actions. Mobile service providers continue to roll out new technology and it is important that the nation's emergency messaging capacity continues to advance along with those upgrades. PBEM strongly urges the Commission to continue its leadership role in ensuring that WEA keeps up with technological advances.